

## **MODULE VII**

### **MISCELLANEOUS TREATMENT UNITS**

#### **VII.A. BDA MISCELLANEOUS TREATMENT UNITS**

##### **VII.A.1. APPLICABILITY**

- VII.A.1.a CAMDS shall not use any of the BDA miscellaneous units to treat any hazardous waste until CAMDS has submitted, and the Executive Secretary has approved, a Brine Dryer compliance test report.
- VII.A.1.b All numeric values included in any of the conditions under VII.A.6., VII.A.7., or VII.A.8. which are marked with an asterisk (\*) are tentative and may be modified after the compliance test results have been evaluated by the Executive Secretary in accordance with R315-8-15.5(c). The Executive Secretary may replace these values with any that are determined to be more protective of human health and the environment. The Executive Secretary may also require additional compliance test runs based on analysis of brines from different types of agents. Furthermore, the Executive Secretary may modify permit conditions based on the results of the compliance tests.
- VII.A.1.c The requirements of condition VII.A. pertain to the following Brine Drying Area (BDA) miscellaneous treatment unit systems:
- |   |      |
|---|------|
| Brine Drum Dryer and associated ancillary equipment | D-1A |
| Brine Drum Dryer and associated ancillary equipment | D-1B |
| Brine Evaporator and associated ancillary equipment |      |

##### **VII.A.2. ALLOWABLE WASTE FEED**

- VII.A.2.a The Permittee may treat Pollution Abatement System (PAS) brine and BDA process water in the BDA miscellaneous units.
- VII.A.2.b The Permittee may treat PAS brine generated from the following:
- VII.A.2.b.i Metal Parts Furnace, Liquid Incinerator, and Deactivation Furnace.
- VII.A.2.b.ii Laboratory testing of brines and salt residue.
- VII.A.2.b.iii Collected from the BDA sumps.
- VII.A.2.b.iv Process water and cleaning solutions from operation and maintenance of the BDA miscellaneous treatment systems.
- VII.A.2.c The Permittee is prohibited from treating any brine with chemical agent concentrations equal to or exceeding 20 ppb for GB and VX, or 200 ppb for mustard.
- VII.A.2.d The Permittee is prohibited from treating any brine, which contains PCBs.

- VII.A.2.e. The Permittee is prohibited from treating waste in the miscellaneous treatment units, identified in Condition VII.A.1, that is not identified in Conditions VII.A.2.a. through VII.A.2.d.

**VII.A.3 BDA TREATMENT SYSTEM DESCRIPTIONS**

- VII.A.3.a. Description of the Brine Drum Dryers, and Brine Evaporator, are found in Attachment 14.
- VII.A.3.b. Drawings showing the Brine Drying Area, Brine Evaporator, and Brine Drum Dryers are located in Attachment 11.

**VII.A.4. IGNITABLE AND INCOMPATIBLE WASTES**

- VII.A.4.a. Ignitable or reactive wastes shall not be treated in any of the BDA treatment systems.
- VII.A.4.b. The Permittee shall not place PAS brine/salt residue in an unwashed container that previously held chemical agent or munitions containing chemical agent.

**VII.A.5. GENERAL OPERATING REQUIREMENTS**

- VII.A.5.a. The Permittee shall not place hazardous wastes, treatment reagents, or other materials in a BDA treatment unit if it could cause the unit, its ancillary equipment, or a containment system to rupture, leak, or otherwise fail.
- VII.A.5.b. The Permittee shall prevent spills and overflows from a treatment unit or containment system using the procedures and equipment described in Attachment 9.
- VII.A.5.c. The Permittee shall operate the secondary containment system using the procedures and equipment described in Attachment 13 and Conditions IV.G., IV.H., and IV.I.
- VII.A.5.d.. The Permittee shall comply with the requirements specified in the Contingency Plan (Attachment 9) when there has been a release that threatens human health or the environment.
- VII.A.5.e. If equipment in the BDA or BDA Whirl/wet dust collection system shuts down, any brine being processed may remain in equipment or piping until the BDA treatment units or BDA Whirl/wet dust collection system is again operational.

**VII.A.6. BRINE EVAPORATOR OPERATING CONDITIONS**

- VII.A.6.a The Permittee shall comply with the Brine Evaporator system operating procedures specified in Attachment 14 of the Permit and the following Conditions:
- VII.A.6.b. The operating pressure of the brine circulation within the Brine Evaporator shall be 15\* to 25\* psig.
- VII.A.6.c. The brine feed rate to each Brine Evaporator shall not exceed 100\* pounds per minute.

VII.A.6.d. Brine fed to the Brine Evaporator shall meet the conditions specified in Attachment 2 and the following conditions:

- o Specific Gravity - 1.00\* to 1.25
- o pH - greater than 7

**VII.A.7. BRINE DRUM DRYERS OPERATING CONDITIONS**

VII.A.7.a The Permittee shall comply with the brine drum dryer systems operating procedures specified in Attachment 14 of the Permit and the following Conditions:

VII.A.7.b. The pressure of the steam feed to the BDA drum dryer systems shall be maintained between 50 psi and 140 psi while brine is being fed to the drum dryers.

VII.A.7.c. The feed rate to each BDA drum dryer shall not exceed 540 gallons per hour.

VII.A.7.d. The feed rate of washdown water and condensate water shall not exceed 1000 gallons per hour.

VII.A.7.e. The BDA drum dryers shall be rotating whenever brine is being fed to the drum dryers.

**VII.A.8. WHIRL/WET DUST COLLECTOR**

VII.A.8.a The Permittee shall comply with the following Conditions:

VII.A.8.b. The gas flow rate to the Whirl/wet dust collector systems shall not exceed 3500\* cfm.

**VII.A.9. RESPONSE TO LEAKS OR SPILLS**

VII.A.9.a In the event of a liquid leak or a spill from a BDA treatment system, from a secondary containment system, or if a system becomes unfit for continued use, the Permittee shall immediately remove the treatment system from service and complete the following actions:

VII.A.9.b. Stop the flow of hazardous waste into the treatment system and inspect the treatment and containment systems to determine the cause of the release.

VII.A.9.c. Remove waste from the treatment and containment system within twenty-four (24) hours of the detection of the leak to prevent further release and allow inspection and repair of the system. If the Permittee finds that it will be impossible to meet this time period, the Permittee shall notify the Executive Secretary and demonstrate that the longer time period is required.

VII.A.9.d. If the collected material is a hazardous waste, it shall be managed in accordance with all applicable requirements of R315-5, R315-6, and R315-8.

VII.A.9.e. Contain visible releases to the environment. The Permittee shall immediately conduct a visual inspection of all releases to the environment and based on that inspection: (1) prevent further migration of the leak or spill to soils or surface water and (2) remove and properly dispose of any visible contamination of the soil or surface water.

- VII.A.9.f. Close the system in accordance with the Closure Plan specified in Attachment 10 unless the following actions are taken:
- VII.A.9.f.i. For a release caused by a spill that has not damaged the integrity of the treatment or containment system, the Permittee shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the treatment system to service.
- VII.A.9.f.ii. For a release caused by a leak from a treatment system or a 24-Hour Intermittent Collection Unit to the secondary containment system, the Permittee shall repair the treatment system or a 24-Hour Intermittent Collection Unit prior to returning it to service.
- VII.A.9.f.iii. If the Permittee replaces a component of the treatment system to eliminate the leak, that component must satisfy the requirements for new tank systems or components in R315-8-10 (40 CFR Sections 264.192 and 264.193 incorporated by reference).
- VII.A.9.g. For all major repairs to eliminate leaks or restore the integrity of a treatment system, the Permittee shall obtain a certification by an independent, qualified, registered professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major repairs are: installation of an internal liner, repair of a ruptured vessel, or repair or replacement of a secondary containment vault.
- VII.A.9.h. The exception to VII.A.9.a. is small amounts of liquid which may splash onto the floor of the BDA from the normal operation of the dryers. These spills or splashes shall be washed down into the sumps and circulated back through the drying process at least once per operating day.
- VII.A.10. DETECTION, MONITORING AND INSPECTION SCHEDULES AND PROCEDURES**
- VII.A.10.a. As described in Attachment 14, the Permittee shall monitor the waste processed in the miscellaneous treatment unit by use of the local control panel, and the manual records maintained by the BDA operators.
- VII.A.10.b. The Permittee shall inspect the treatment and containment systems, in accordance with the Inspection Schedule specified in Attachment 5 and shall comply with Conditions VII.A.9.b. and VII.A.9.c. as part of those inspections.
- VII.A.10.c. The Permittee shall maintain, calibrate, and operate process monitoring, control and recording equipment, while storing or treating hazardous waste in permitted hazardous waste treatment units.
- VII.A.10.d. The Permittee shall inspect the following components of the tank system, at a minimum, of once each day when operating:
- VII.A.10.d.1. Aboveground portions of the tank system, including the bottom of the tank(s), to detect corrosion or releases of waste;

- VII.A.10.d.2. Construction materials and the area immediately surrounding the externally accessible portion of the treatment system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste.

**VII.A.11. RECORD KEEPING AND REPORTING**

- VII.A.11.a. The Permittee shall verbally report to the Executive Secretary within twenty-four (24) hours of detection, when a leak or spill occurs from the treatment system or secondary containment system to the environment, in accordance with Condition I.T.
- VII.A.11.b. Releases from a treatment system that are contained within a secondary containment system need not be reported as required in VII.A.11.a. However, such release shall be recorded in the Operating Record.
- VII.A.11.c. In addition to complying with the requirements of Condition I.T.5., within thirty (30) calendar days of detecting a release to the environment from the treatment system or secondary containment system, the Permittee shall report the following to the Executive Secretary:
- VII.A.11.c.i. Likely route of migration of the release;
- VII.A.11.c.ii. Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate);
- VII.A.11.c.iii. Results of any monitoring or sampling conducted in connection with the release. If the Permittee finds it will be impossible to meet this time period, the Permittee shall provide the Executive Secretary with a schedule of when the results will be available. This schedule must be provided before the required thirty (30) calendar day submittal period expires;
- VII.A.11.c.iv. Proximity of down gradient drinking water, surface water, and populated areas; and
- VII.A.11.c.v. Description of response actions taken or planned.
- VII.A.11.d. The Permittee shall keep on file at the Facility the written treatment system assessments in accordance with R315-8-10 (40 CFR Section 264.192 incorporated by reference) of each treatment system's integrity and suitability for handling hazardous waste, until such time that the treatment system is certified closed in accordance with Condition II.I.6.
- VII.A.11.e. The Permittee shall maintain at the Facility a record of the results of leak tests and integrity tests conducted in accordance with the assessment of the treatment system.
- VII.A.11.g. The Permittee shall document compliance with Conditions VII.A.10.b. and VII.A.10.c. and place this documentation in the operating record for the facility.
- VII.A.11.h. The Permittee shall submit to the Executive Secretary all certifications of major repairs to correct leaks within seven (7) calendar days from returning the treatment systems to use.

**VII.A.12. CLOSURE**

VII.A.12.a. The Permittee shall close the treatment systems in accordance with condition II.I.

**VII.B. MATERIAL DECONTAMINATION CHAMBER 2**

**VII.B.1. APPLICABILITY**

VII.B.1.a. The Permittee may treat the wastes identified in Condition VII.B.2. in the Material Decontamination Chamber 2 (MDC2).

**VII.B.2. ALLOWABLE WASTE FEED**

VII.B.2.a. The Permittee may treat agent contaminated Demilitarization Protective Ensembles (DPE) and butyl rubber protective clothing carrying the following waste codes:

D002	D004	F999	P999
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VII.B.2.b. The Permittee shall be prohibited from storing or treating, in the MDC2, wastes not identified in Condition VII.B.2.a.

**VII.B.3. MATERIAL DECONTAMINATION CHAMBER 2 DESCRIPTION**

VII.B.3.a. A description of the MDC2 is found in Attachment 14.

VII.B.3.b. A drawing showing the configuration of the MDC2 is shown in Drawing TCDS 44-200-01, Attachment 11.

**VII.B.4. MATERIAL DECONTAMINATION CHAMBER 2 OPERATING REQUIREMENTS**

VII.B.4.a. The Permittee shall comply with the Material Decontamination Chamber 2 specified in Attachment 14 and the following Conditions:

VII.B.4.a.i. The Permittee shall not treat more than 24 DPE suits in any one batch.

VII.B.4.a.ii. The temperature of the circulated air prior to the carbon filter shall not exceed 375° F.

VII.B.4.a.iii. The flow rate of the circulated air shall not exceed 3,000 acfm.

VII.B.4.a.iv. The Permittee shall monitor air exiting the MDC2 to the site ventilation system with ACAMS and DAAMS for all agents being treated when the treatment process is completed and the chamber is cooled. Monitoring will occur for at least 1 hour after the damper to the site ventilation system is opened.

- VII.B.4.a.v. The Permittee shall, maintain operating temperature and air flow for a minimum of 8 hours. At that time, the heat will be turned off, while maintaining air circulation. When the oven temperature cools to 120° F, the ACAMS monitoring will be turned on. If the agent concentration recorded by the ACAMS is below the time weighted average (TWA) specified in Table 1, Agent Exposure Limits, for a minimum of two consecutive monitoring cycles, the treated DPE suits may be removed. If the agent concentration is not below the TWA, treatment will continue until the agent concentration is below the TWA specified in Table 1.

<b>Table 1</b> <b>Agent Exposure Limits<sup>1</sup></b>					
	<b>Chemical Agent Concentrations (mg/m<sup>3</sup>)</b>				
<b>Agent</b>	<b>GA</b>	<b>GB</b>	<b>Mustard<sup>4</sup></b>	<b>L</b>	<b>VX</b>
Time Weighted Average <sup>2</sup>	0.0001	0.0001	0.003	0.003	0.00001
General Population Limit <sup>3</sup>	0.000003	0.000003	0.0001	0.003	0.000003
<sup>1</sup> These limits were published in the March 15, 1988 Federal Register (53 FR 8504). Corrections were made in the April 4, 1988 Federal Register (53 FR 11002). <sup>2</sup> Averaging time is 8-hour workday. <sup>3</sup> Averaging time is 72 hours. <sup>4</sup> Mustard includes H, HD, and HT.					

- VII.B.4.b. The Permittee shall continuously monitor for all agents being treated during treatment of waste in the Material Treatment Facility.
- VII.B.4.c. The Permittee shall either replace the carbon in the MDC2 filter with new carbon prior to treating waste contaminated with a different agent type or the permittee shall monitor downstream of the carbon filter for all possible chemical agents to which the carbon filter has been exposed.
- VII.B.4.d. The Permittee shall not transport the treated waste offsite until the Permittee has demonstrated to the Executive Secretary through extraction procedures that the treated waste is determined agent free in accordance with Attachment 2.

**VII.B.5. IGNITABLE OR REACTIVE WASTES**

The Permittee shall not place ignitable or reactive waste in the Material Decontamination Chamber 2 unless the waste is treated, rendered, or mixed before or immediately after placement in the Material Decontamination Chamber 2 so that the resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste.

**VII.B.6. INCOMPATIBLE WASTES**

The Permittee shall not place incompatible materials in the MDC2.

**VII.B.7. INSPECTION SCHEDULES AND PROCEDURES**

The Permittee shall inspect the MDC2 in accordance with Condition II.D and Attachment 5.

**VII.B.8. RECORD KEEPING AND REPORTING**

VII.B.8.a. The Permittee shall place in the operating record for the MDC2 the temperature of the circulated air prior to the carbon filter, at a minimum every operational hour.

VII.B.8.b. The Permittee shall record in the operating record verification of recirculation air flow through the MDC2 system at a minimum of once each operating day.

**VII.B.9. CLOSURE**

The Permittee shall close the MDC2 in accordance with Condition II.I.

**VII.C. PROJECTILE/MORTAR DISASSEMBLY MACHINE (PMD)**

**VII.C.1. APPLICABILITY**

VII.C.1.a. The Permittee may treat the wastes identified in Condition VII.C.2. in the Projectile/Mortar Disassembly Machine (PMD).

**VII.C.2. ALLOWABLE WASTE FEED**

VII.C.2.a. The Permittee may treat the following wastes:

MUNITION	AGENT	WASTE CODE
155mm M104/M110 Projectile	H	D003, P999
155mm M121/M122 Projectile	GB	D003, P999
155mm M121A1 Projectile	GB, VX	D003, P999
155mm Projectile	None	D001, D003
105mm M360 Projectile	GB	D003, P999
105mm M60 Projectile	None	D003
4.2 inch M2/M2A1 Mortar	HD, HT	D003, P999

VII.C.2.b. The Permittee shall be prohibited from storing or treating wastes in the PMD not identified in Condition VII.C.2.a.

**VII.C.3. PMD DESCRIPTION**

VII.C.3.a. A description of the PMD is found in Attachment 14.

VII.C.3.b. A drawing showing the configuration of the PMD is shown in Drawing TCDS 92-201-01, Attachment 11.



**VII.C.4. PMD OPERATING REQUIREMENTS**

VII.C.4.a. The Permittee shall comply with the Projectile/Mortar Disassembly Machine procedures specified in Attachment 14 and the following Conditions:

VII.C.4.a.i. The Permittee shall only treat munitions of one type and chemical agent in any single campaign.

**VII.C.5. INCOMPATIBLE WASTES**

VII.C.5.a The Permittee shall not place incompatible materials in the PMD.

**VII.C.6. INSPECTION SCHEDULES AND PROCEDURES**

VII.C.6.a The Permittee shall inspect the PMD in accordance with Attachment 5.

**VII.C.7. RECORD KEEPING AND REPORTING**

VII.C.7.a. The Permittee shall record in the operating record the following:

VII.C.7.a.i. PMD feed rate,

VII.C.7.a.ii. Munition type, LOT NUMBER,

VII.C.7.a.iii. Agent type, and

VII.C.7.a.iv. Whether the munition was leaking.

**VII.C.8. CLOSURE**

The Permittee shall close the PMD in accordance with Condition II.I.

**VII.D. MULTIPURPOSE DEMILITARIZATION MACHINE (MDM)**

**VII.D.1. APPLICABILITY**

VII.D.1.a. The Permittee may treat the wastes identified in Condition VII.D.2. in the Multipurpose Demilitarization Machine (MDM).

**VII.D.2. ALLOWABLE WASTE FEED**

VII.D.2.a. The Permittee may treat the following waste:

MUNITION	AGENT	WASTE CODE
155mm M104/M110 Projectile	H	P999
155mm M121/M122 Projectile	GB	P999
155mm M121A1 Projectile	GB, VX	P999
105mm M360 Projectile	GB	P999
4.2 inch M2/M2A1 Mortar	HD, HT	P999

VII.D.2.b. The Permittee shall be prohibited from treating waste with an explosive component.

VII.D.2.c. The Permittee shall be prohibited from treating wastes not identified in Condition VII.D.2.a.

**VII.D.3. MDM DESCRIPTION**

VII.D.3.a. A description of the MDM is found in Attachment 14.

VII.D.3.b. A drawing showing the configuration of the MDM is shown in Drawing TCDS 62-300-01, Attachment 11.

**VII.D.4. MDM OPERATING REQUIREMENTS**

VII.D.4.a. The Permittee shall comply with the Multipurpose Demilitarization Machine procedures specified in Attachment 14 and the following Conditions:

VII.D.4.a.i. The Permittee shall only treat munitions of one type and chemical agent in any single campaign.

VII.D.4.a.ii. The Permittee shall not advance a projectile past the pull and drain station until the Permittee has verified that the projectile has been drained so that less than 5%\* agent by volume of a full projectile remains in the projectile.

**VII.D.5. INCOMPATIBLE WASTES**

The Permittee shall not place incompatible materials in the MDM.

**VII.D.6. INSPECTION SCHEDULES AND PROCEDURES**

The Permittee shall inspect the MDM in accordance with Attachment 5.

**VII.D.7. RECORD KEEPING AND REPORTING**

VII.D.7.a. The Permittee shall record in the operating record the following:

VII.D.7.a.i. MDM feed rate;

VII.D.7.a.ii. Munition type, lot number, munition number;

VII.D.7.a.iii. Agent type, and;

VII.D.7.a.iv. Whether the munition was leaking.

**VII.D.8. CLOSURE**

The Permittee shall close the MDM in accordance with Condition II.I.

**VII.E. BULK DRAIN STATION (BDS)**

**VII.E.1. APPLICABILITY**

VII.E.1.a. The Permittee may treat the wastes identified in Condition VII.E.2. in the Bulk Drain Station (BDS).

**VII.E.2. ALLOWABLE WASTE FEED**

VII.E.2.a. The Permittee may treat the following waste:

MUNITION	AGENT	WASTE CODE
Ton Container	GA	D021, P999
Ton Container	GB, VX, HD, or HT	P999
TMU 28/B Spray Tank	VX	P999
MC-1 Bombs	GB	P999
MK-116 Weteye Bombs	GB	P999

VII.E.2.b. The Permittee shall be prohibited from treating munitions with an explosive component.

VII.E.2.c. The Permittee shall be prohibited from storing or treating wastes not identified in Condition VII.E.2.a.

**VII.E.3. BDS DESCRIPTION**

VII.E.3.a. A description of the BDS is found in Attachment 14.

VII.E.3.b. A drawing showing the configuration of the BDS is shown in Drawing TCDS 67-300-02, Attachment 11.

**VII.E.4. BULK DRAIN STATION OPERATING REQUIREMENTS**

VII.E.4.a. The Permittee shall comply with the Bulk Drain Station procedures specified in Attachment 14 and the following Conditions:

VII.E.4.a.i. The Permittee shall only treat munitions of one type and chemical agent in any single campaign.

VII.E.4.a.ii. The Permittee shall not feed munitions at a rate exceeding the feed rate of the Metal Parts Furnace.

VII.E.4.a.iii. The Permittee shall not advance a bulk item past the bulk drain station until the Permittee has verified that the bulk container has been drained so that less than 5%\* (8% for GB TCs) agent by volume of a full container remains in the bulk container.

**VII.E.5. INCOMPATIBLE WASTES**

The Permittee shall not treat incompatible materials into the Bulk Drain Station.

**VII.E.6. INSPECTION SCHEDULES AND PROCEDURES**

The Permittee shall inspect the Bulk Drain Station in accordance with Attachment 5.

**VII.E.7. RECORD KEEPING AND REPORTING**

VII.E.7.a. The Permittee shall place the following in the operating record for the Bulk Drain Station:

VII.E.7.a.i. Bulk Drain Station feed rate,

VII.E.7.a.ii. Weight of munition before and after treatment in the Bulk Drain Station and % of agent drained,

VII.E.7.iii. Munition type,

VII.E.7.iv. Agent type,

VII.E.7.v. Whether the munition was leaking.

**VII.E.8. CLOSURE**

The Permittee shall close the Bulk Drain Station in accordance with Condition II.I.

**VII.F. ROCKET SHEAR MACHINE (RSM)**

**VII.F.1. APPLICABILITY**

VII.F.1.a. The Permittee may treat the wastes identified in Condition VII.F.2. in the Rocket Shear Machine (RSM).

**VII.F.2. ALLOWABLE WASTE FEED**

VII.F.2.a. The Permittee may treat the following waste:

MUNITION	AGENT	WASTE CODE
M55 Rocket	GB	D003, P999

MUNITION	AGENT	WASTE CODE
M55 Rocket	VX	D003, P999

VII.F.2.b. The Permittee shall be prohibited from storing or treating wastes not identified in Condition VII.F.2.a.

**VII.F.3. RSM DESCRIPTION**

VII.F.3.a. A description of the Rocket Shear Machine is found in Attachment 14.

VII.F.3.b. A drawing showing the configuration of the Rocket Shear Machine is shown in Drawing TCDS96-200-01, Attachment 11.

**VII.F.4. RSM OPERATING REQUIREMENTS**

VII.F.4.a. The Permittee shall comply with the Rocket Shear Machine procedures specified in Attachment 14 and the following Conditions:

VII.F.4.a.i. The Permittee shall only treat munitions of one type and chemical agent in any single campaign.

VII.F.4.a.ii. The Rocket Shear Machine may not process rockets until trial burns have been performed and feed rates for the Deactivation Furnace System (DFS) have been established.

VII.F.4.a.iii. The feed rate of rockets through the RSM shall not exceed the feed rate of the DFS.

**VII.F.6. INCOMPATIBLE WASTES**

The Permittee shall not treat incompatible materials into the Rocket Shear Machine.

**VII.F.7. INSPECTION SCHEDULES AND PROCEDURES**

The Permittee shall inspect the Rocket Shear Machine in accordance with Attachment 5.

**VII.F.8. RECORD KEEPING AND REPORTING**

VII.F.8.a. The Permittee shall place the following in the operating record for the Rocket Shear Machine:

VII.F.8.a.i. Rocket Shear Machine feed rate,

VII.F.8.a.ii. Munition type, lot number or munition number

VII.F.8.a.iii. Agent type, and

VII.F.8.a.iv. Whether the munition was leaking.

**VII.F.9. CLOSURE**

The Permittee shall close the Rocket Shear Machine in accordance with Condition II.I.

**VII.G. ROCKET SEPARATION MACHINE (APE 1240)**

**VII.G.1. APPLICABILITY**

VII.G.1.a. The Permittee may treat the wastes identified in Condition VII.G.2. in the Rocket Separation Machine (APE 1240).

**VII.G.2. ALLOWABLE WASTE FEED**

VII.G.2.a. The Permittee may treat the following waste:

MUNITION	AGENT	WASTE CODE
M55 Rocket	GB	D003, P999
M55 Rocket	VX	D003, P999

VII.G.2.b. The Permittee shall be prohibited from storing or treating wastes not identified in Condition VII.G.2.a.

**VII.G.3. APE 1240 DESCRIPTION**

VII.G.3.a. A description of the Rocket Separation Machine is found in Attachment 14.

VII.G.3.b. A drawing showing the configuration of the Rocket Separation Machine is shown in Drawing APE No. 1240, Attachment 11.

**VII.G.4. APE 1240 OPERATING REQUIREMENTS**

VII.G.4.a. The Permittee shall comply with the Rocket Separation Machine procedures specified in Attachment 14 and the following Conditions:

VII.G.4.a.i. The Permittee shall only treat munitions of one type and chemical agent in any single campaign.

**VII.G.5. INCOMPATIBLE WASTES**

The Permittee shall not treat incompatible materials into the Rocket Separation Machine.

**VII.G.6. INSPECTION SCHEDULES AND PROCEDURES**

The Permittee shall inspect the Rocket Separation Machine in accordance with Attachment 5.

**VII.G.7. RECORD KEEPING AND REPORTING**

VII.G.7.a. The Permittee shall place the following in the operating record for the Rocket Separation Machine:

- VII.G.7.a.i. Rocket Separation Machine feed rate,
- VII.G.7.a.ii. munition type, lot number or munition number
- VII.G.7.a.iii. agent type, and
- VII.G.7.a.iv. whether the munition was leaking.

**VII.G.8. CLOSURE**

The Permittee shall close the Rocket Separation Machine in accordance with Condition II.I.

**VII.H. INSTRUMENTED TON CONTAINER (ITC) MISCELLANEOUS TREATMENT UNITS**

**VII.H.1. APPLICABILITY**

- VII.H.1.a CAMDS shall not use any of the ITCs to treat any hazardous waste until CAMDS has submitted an approved VX Neutralization test plan to the Executive Secretary.

**VII.H.2. ALLOWABLE WASTE FEED**

- VII.H.2.a The permittee may treat agent VX in the ITC miscellaneous units.
- VII.H.2.a.i. The permittee may treat VX wastes that include VX hydrolysis intermediate compounds in the ITC miscellaneous units.
- VII.H.2.a.ii. The permittee is prohibited from treating any waste that is not identified in the approved project test plan as required in Condition VII.H.1.a.

**VII.H.3. INSTRUMENTED TON CONTAINER (ITC) TREATMENT SYSTEM DESCRIPTIONS**

- VII.H.3.a. Descriptions of the ITCs are found in Attachment 14.
- VII.H.3.b. Additional descriptions of the ITCs, including sketches and drawings can be found in the approved ITC test plans.

**VII.H.4. IGNITABLE AND INCOMPATIBLE WASTES**

- VII.H.4.a. Ignitable wastes shall not be treated in any of the ITC miscellaneous treatment units.

**VII.H.5. GENERAL OPERATING REQUIREMENTS**

- VII.H.5.a. The Permittee shall not place hazardous wastes, treatment reagents, or other materials in an ITC treatment unit if it could cause the unit, its ancillary equipment, or a containment systems to rupture, leak, or otherwise fail.

- VII.H.5.b. The Permittee shall prevent spills and overflows from a treatment unit or containment system using the procedures and equipment described in Attachment 9.
- VII.H.5.c. The Permittee shall operate the secondary containment system using the procedures and equipment described in Attachment 13 and Conditions IV.G., IV.H., and IV.I. as applicable.
- VII.H.5.d. The Permittee shall comply with the requirements specified in the Contingency Plan (Attachment 9) when there has been a release that threatens human health or the environment.
- VII.H.5.e. If ITC equipment fails or must be shut down, the agent being processed may remain in the ITC and associated piping until the system is again operational.

**VII.H.6. INSTRUMENTED TON CONTAINERS (ITCs) OPERATING CONDITIONS**

- VII.H.6.a. The Permittee shall comply with the Instrumented Ton Container operating procedures specified in Attachment 14 of the Permit, and the approved Project Test Plan.
- VII.H.6.b. The Permittee shall submit and new project test plan and receive approval from the Executive Secretary in writing when the project test plan changes operating parameter ranges prior to conducting additional treatment in accordance with the new parameters.
- VII.H.6.c. The Permittee shall treat VX in standard ton containers or in Instrumented Ton Container (ITC) vessels.
- VII.H.6.d. The Permittee shall not treat more than two-ton containers of VX at any time.
- VII.H.6.e. The VX/Water solution being treated may be mixed.
- VII.H.6.f. The Permittee shall continuously monitor for VX when test material is in the BIF Agent Drain Bay room.
- VII.H.6.g. The Permittee shall not further treat the waste generated in any other treatment unit without prior approval by the Division of Solid and Hazardous Waste.
- VII.H.6.h. The Permittee shall characterize the effluent hydrolysate for VX concentration and organic constituents concentration prior to any treatment.
- VII.H.6.i. Treatment of VX agent by in-situ hydrolysis shall not exceed 180 days per ton container.

**VII.H.7. INSPECTION SCHEDULES AND PROCEDURES**

- VII.H.7.a. The Permittee shall inspect the ITCs and associated equipment in accordance with Attachment 5.

**VII.H.8. RECORD KEEPING AND REPORTING**

- VII.H.8.a. The Permittee shall record in the operating record the following:



VII.H.8.a.i The amount of agent treated in each batch.

VII.H.8.a.ii The agent lot number.

**VII.H.9. CLOSURE**

VII.H.9.a The disposition of the ITC and ancillary equipment will be addressed in the project test plans.